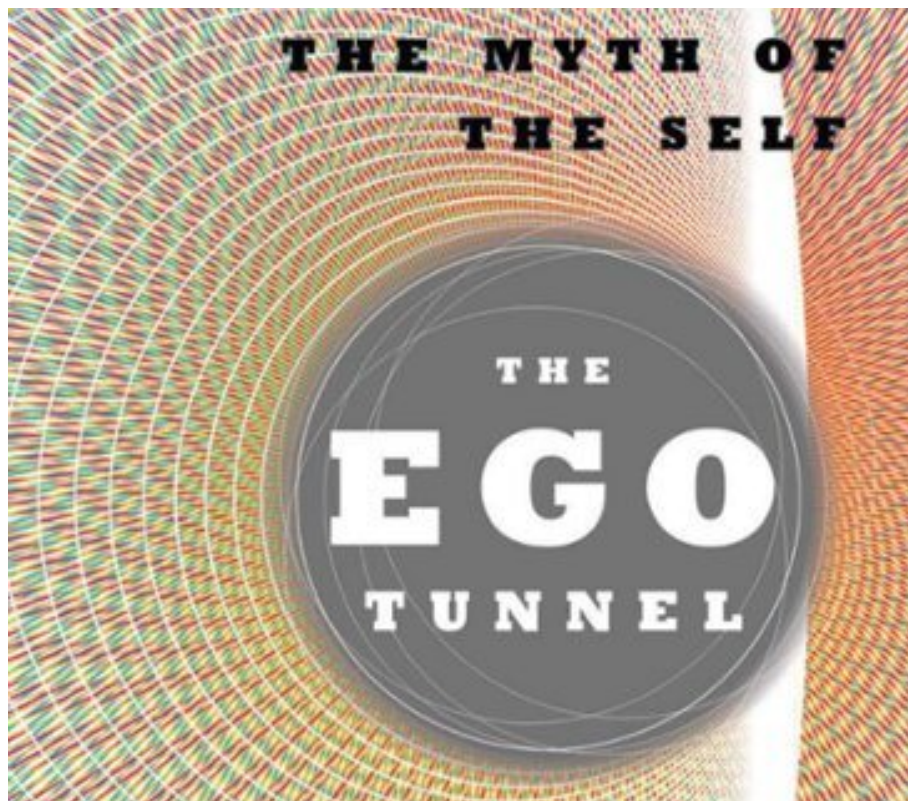


Pretentious & presumptuous

a review of Thomas Metzinger's



the ego tunnel was released in 2009

this review is from 2013

by nada alleen

the following is with which Thomas Metzinger introduces his book...

he [Ludwig Wittgenstein] once greeted me with the question: "why do people say that it was natural to think that the sun went round the earth rather than that the earth turned on its axis?" I replied: "I suppose, because it looked as if the sun went round the earth." "well," he asked, "what would it have looked like if it had looked as if the earth turned on its axis?"

– Elizabeth Anscombe, *An introduction to Wittgenstein's Tractatus* (London 1959, p. 151)

to pose an hypothetical question analogous to the one above

"why was it natural for neuroscientists in the 20th/21st century to think that the brain produced conscious thought rather than that consciousness acted upon the electrochemical processes in the brain?"

I reply: "I suppose, because it looked as if the brain produced conscious thought"
"Well," one may ask, "what would it have looked like if it had looked as if consciousness acted upon electrochemical processes in the brain?"

his attempt at convincing us "*that there is no such thing as a self*" consists of (a somewhat lengthy) introduction + 9 chapters.

i plan to review some of what Mr. Metzinger wrote. his introductive overview and the first 4 chapters. which is about half the book. Every quote that comes directly from his book is within quotation marks and in italic.

introduction

"contrary to what most people believe, nobody has ever been or had a self. but it is not just that the modern philosophy of mind and cognitive neuroscience together are about to shatter the myth of the self."

that's quite a statement. some (modern) academics according to him are about to shatter the "myth" of the self. a century ago, some academics were also about to locate memory traces in the brain. both has yet to be accomplished. untill then, to say that there is no self is nth but the expression of a materialist's wishful thinking.

"it has now become clear that we will never solve the philosophical puzzle of consciousness — that is, how it can arise in the brain, which is a purely physical object — if we don't come to terms with this simple proposition: that to the best of our current knowledge there is no thing, no indivisible entity, that is us, neither in the brain nor in some metaphysical realm beyond this world."

they can't solve their puzzle utilizing their base beliefs, so instead of changing their premises to sth more realistic, we're instead urged to accept a “*simple proposition*” (a statement that expresses an opinion) and put aside our lofty expectations we might have of scientists that they come up with evidence. would be nice of them to rise above the niveau of religion, and to present us straight facts instead of dogmas, but, alas...

so, when one admits there will never be any explanation of “*how it can arise in the brain*”, it indeed does make sense to add 1 and 1 together (1+1) and conclude that consciousness does not arise from the physical. like he does. but to then proclaim there is no such thing at all, only because you can't find it in the manner it would suit you, is not necessarily convincing.

to quote William James, "the universal conscious fact is not 'feelings and thoughts exist' but 'i think' and 'i feel'" . if neuroscience can't locate the "I", the self ("something the presence of which we can feel almost constantly at the innermost subjective pole of our experience" -Edward F. Kelly) and it can't... obviously, yet it depends on some observer, an "I" to analyse the fMRI/PET/EEG/MEG brainscans, it basically questions the fundaments of its own science by questioning the existence of the "I".

to reject metaphysics altogether is only consequent for a materialist. and also retarded. "so far, what our cognitive science has found out about the mind is mostly that we don't know how it works" -J.Fodor

"the new mind sciences have generated a flood of relevant data but no model that can, at least in principle, integrate all these data."

let me use this occasion to recommend you Frederic Myers' "human personality and its survival of bodily death" and his filter model there which can integrate all these data.

Introduction, part 2

THE PHENOMENAL SELF

according to Thomas, the Ego is the product of his so-called *PSM (phenomenal self-model)*, and is no more than an illusion activated by the brain. it's part of an internal "virtual reality" consisting of a self-model and a world-model. *"by placing the self-model within the world-model, a center is created."*

how the brain could possibly compute sth like this, is none of his concern, though. we are being left in the dark, and are presented with nth but theory, which on top of that suffers from equivocation. here's an example

"that center is what we experience as ourselves [...] we are not in direct contact with outside reality or with ourselves, but we do have an inner perspective."

"we" (who are just an illusion) experience...

does an illusion experience sth? how come? aren't illusions the ones who are being experienced?

"we" (who are just an illusion) are not in direct contact with... *"ourselves"*

if *"ourselves"* here means "our brains" then

is an illusion not in direct contact with those/that who/which have/has it?

if *"ourselves"* here means "ourselves, the illusion" then

is there a gap inside the illusion? is it split into parts which have no contact to one another?

"we" (who are just an illusion) have an inner perspective.

does an illusion have its own inner perspective? how come? It would appear to most people, an illusion requires that there is an perspective outside of it from which one can look at it. if the perspective was somewhere inside of it then looking via this perspective you would only see part of the illusion. (e.g. only the front side) you would not see the rest and would not know whether or not there's more to it on the back side? more than it just being an illusion.

or is this "we" supposed to mean "our brains"?
it would follow...

"we" (our brains) experience a center

this throws up questions: it remains to be explained where this center is supposed to be (certainly not in the center of the brain, because neuralactivity takes place globally, not centered) and how it's distinguished from the rest and identified as a center... cause gray matter looks all the same, no matter where it is. and if brains "experience", do other organs also "experience"? they are matter, just like brains.

"we" (our brains) are not in direct contact with "*outside reality* "

well on the *outside*, brains are in direct contact with the rest of our bodies. are bodies not part of *reality* ? are brains just floating in a sea of metaphysical energy?

"we" (our brains) are not in direct contact with ourselves

if "*ourselves*" means "our brains"

brains are brains. they are themselves. how much more direct could the contact possibly be?

if "*ourselves*" means "ourselves, the illusion"

that would be odd. what are the illusions in direct contact with? they must be with sth. at least with that which generates it.

let's proceed to his coinage of a new term:

"our conscious model of reality is a lowdimensional projection of the inconceivably richer physical reality surrounding and sustaining us". "conscious experience is like a tunnel", "the ego tunnel".

let's move on

"the idea of an ego tunnel is based on an older notion [...] that "in moving through this world, we constantly apply unconscious filter mechanisms, and in doing so, we unknowingly construct our own individual world, which is our "reality tunnel". we are never directly in touch with reality as such, because these filters prevent us from seeing the world as it is."

his reasons for introducing a new word instead of using what has already been around, "*reality tunnel*", are 2 distinctions he draws between his concept and the

prior one.

firstly, *"we don't create an individual world but only a worldmodel"*

what is one to think about this? reading through the definition of *"reality tunnel"* one clearly sees that the *"individual world"* is shaped from input of the outside world. this *"individual world"* is a simplified, individual model of the world. a *"world model"* just like his.

secondly, *"the whole idea of potentially being directly in touch with reality is a sort of romantic folklore"*

well, the *"reality tunnel"* says *"we are never directly in touch with reality as such"*, which is exactly what Thomas claims himself.

BUT it fails to mention *"romantic folklore"*.

"we know the world only by using representations, because (correctly) representing something is what knowing is"

this requires further elaboration, because "to represent sth" could mean

"to be (like) sth", "to be a symbol of sth", "to (verbally/visually) describe sth" "to express/fight for common/someone else's views", "to substitute/stand for sth". he mentioned at the very beginning *"this book has not been written for philosophers or scientists"*, yet a normal person would not necessarily know what means when he says speaks of representations in connection with knowing. he means "symbol-processing", i suppose, and someone not familiar with CTM (the computational theories of the mind) might not know what that exactly is.

it's about the brain (which according to CTM adversaries is like a computer) having symbols (encoded stuff) that represent (substitute/stand for) stuff from the real world. on those symbols rule-governed operations are being exerted, in a syntactical manner. like in a computer program.

there are known problems with CTM. one of which is...

in a normal, non-computational sense, a thing represents (substitutes/stands for) a different thing only if it has consciously been decided to be so. a person with an already-existent spectrum of mental faculties is necessary for such a decision. symbols that are being manipulated in CTM programs, have had their representations encoded into them by such a person. they haven't had their representations built up from the basic software. yet, CTM is based on the assumption that somehow, low-level brain functions can do that.

representations presuppose the possession of necessary "memories, desires, intentions, skills and conceptual capacities" (Alan Gauld) . in other words, one needs to "know" first before one can represent. (correctly) representing something is certainly an indication for existing knowledge, but, contrary to what Thomas does, it can not be put onto the same layer and treated as synonymous with knowing.

chapter 1

THE APPEARANCE OF A WORLD

"consciousness is the appearance of a world"

i guess every dictionary will disagree with this definition.

generally, consciousness is understood as: the state of being aware. or of being able to understand what is happening. *"the appearance of a world"* itself wouldn't account for all the faculties consciousness is (commonly) associated with.

fortunately, he then moves away from this over-simplified equation

"consciousness [...] has many discernible aspects: memory, attention, feelings, the perception of color, self-awareness, and higher-order thought. nevertheless, the essence of the phenomenon — what I call the appearance of a world — seems to be preserved throughout."

so, *"the appearance of a world, a single and unified reality"* is just part (the essence) of it, not the whole spectrum. ok.

when people experience the so-called migraine aura, its core phenomenology consisting of bright, scintillating lines moving around (forming various geometrical shapes) in the visual field, clearly distinct from the world these people are living in and conscious of, one wonders... how is such an phenomenon compatible with the concept of *"a single and unified reality"*. attempts to explain this as visual artifacts made within the eye, so far, failed.

waking apparitions (involuntary visual imagery, that people clearly distinguish from what they would normally see) and the (moments of) transitioning from one "state of consciousness" to another, when people ingest drugs, or have a mystical experience, when the world one perceives, dissolves away, and makes place for another one and there's a mixture of worlds taking place, one wonders if *"the appearance of a world — seems to be preserved throughout"* during all states of consciousness.

Thomas himself is aware of certain eccentric neurological states where one's senses aren't in tune with one another, which he mentions in chapter 2. and also that people who *"experimented with major doses of hallucinogens can perhaps conceive of what it means to live in more than one tunnel at a time"*. i'll get back to that later.

now, besides it being questionable whether one's perception is limited to just a *"single and unified reality"*, it presupposes (by making appearing worlds a necessary

aspect of consciousnesses) that our universe came into being all by itself, without any coordination by a preexisting (existing before any world appeared) consciousness or God.

that's the atheist's stance. but far from being a fact. cosmologists, after having become aware how likely it is (which is to say, it's very unlikely) that life evolved randomly (by chance) in outer space, came up with the (M-)theory of there being a vast number of parallel universes, for which there is no empirical evidence, which violates science's self imposed guideline of occam's scissor (saying "plurality should not be posited without necessity") and which lead to the existence of black holes. noone has ever seen any black holes. lorentz' contraction (the idea that space gets distorted) the fundament on which black holes rest, contradicts the persistence of vision (the idea that space only appears to get distorted because light takes a while to travel). all this just to make it more plausible that out of all those parallel universes, there happened to be one, the one we live in, which just happened to randomly fine-tune itself for the emergence of life. but in the end, an infinite God could aswell have created an infinite amount of universes.

India's psychology says there's 4 forms of consciousness: ordinary, dreaming, dreamless sleep, turiya. from the mandukya upanishad:

"the 4th, say the wise, is not subjective experience, nor objective experience, nor experience intermediate between these 2, nor is it a negative condition which is neither consciousness nor unconsciousness. it is not the knowledge of the senses, nor is it relative knowledge, nor yet inferential knowledge. beyond the senses, beyond the understanding, beyond all expression, is the 4th. it is pure unitary consciousness, wherein awareness of the world and multiplicity is completely obliterated."

from this would follow, consciousness doesn't require a world to exist.

let's move on.

"the empirical evidence for animal consciousness is now far beyond any reasonable doubt"

i agree with this. how could there have been any doubt in the first place?

"this property, as noted, probably distinguishes us from most other animals on this planet: the ability to turn the first-person perspective inward, to explore our emotional states and attend to our cognitive processes. [...] these are "higher-order" levels of the PSM. they allowed us to become aware of the fact that we are representational systems."

i'm not aware of the "fact" that i am a representational system, but, anyways, why would most animals not be able to explore their emotional states and attend to their cognitive processes? only because they can't make themselves understood and tell us about what they feel/think is no reason to jump to such a conclusion.

"we have learned many lessons. We have learned how great the fear of reductionism is, in the humanities as well as among the general public"

that's true, there's good reasons for this. and some of those he mentions himself , like...

"many deep forms of conscious self-experience have become all but impossible [...] for the many millions of well-educated, scientifically informed people."

scientific information and ("good") education would equal impoverishment in the category of deep conscious self-experience.

"consciousness [...] does change through practice". "theories change social practice".

i guess so, the theories mama academia marks as orthodox have a deep impact upon the practices in various social institutions.

if mama academia proclaims that we are all just meat machines, we'll be treated like meat machines and raised into believing we are nth but meat machines, meant to do monotonous work like machines do.

if mama academia proclaims, like she already has, that our mind is nth but the result of brainactivity, and there's experts having figured out how it works, enormous sums of money and of personal will get designated for attacking people's brainchemistry whenever there are any complaints, instead of for solving problems in the real life outside. thus turning people into drug addicts. drugs that on top of that often don't work, and when they do they have side effects.

"some fear that a materialistic disenchantment, along with advances in the sciences of the mind, may have unwanted social and cultural consequences. [...] these voices are absolutely right"

yes. and despite its potential for unwanted consequences, you're pushing the materialistic ideology.

"adopting a primitive scientific ideology would be just as bad as succumbing to mysterianism [...] we are already beginning to find the first neural correlates of specific forms of conscious content"

but he admits that, *"what we do not know is how far discovering such neural correlates will go toward explaining consciousness. correlation is not causation, nor is it explanation"*

why should one be optimistic about neuroscience then? about it ever succeeding at a full neurological correlation (let alone explanation) of consciousness? mysterianism seems like a valid position to me.

"as soon as we know the sufficient physical correlates [...] we will be able to modulate our sensations of color or smell, and intensify or extinguish them, by stimulating or inhibiting the relevant groups of neurons"

neuroscientists are (already today) "exciting" neurons to raise the appetite of people who have been labelled anorexic. they already found the sufficient physical correlates for the desire to eat, but, it doesn't work for everyone. it seems, only because these neurons are stimulated, their conscious will still has a say in this process, and is able to override these artificial stimuli. all those for whom this "neuro-appetizer" worked, have made up their mind in favor of such a therapy already beforehand, and were consciously embracing its effect.

"this may also be true for emotional states, such as empathy, gratitude, or religious ecstasy."

mystical experiences, and OBEs can be triggered via drugs, i guess religious ecstasy might be aswell. but the exact contents of these experiences are individual, and aren't determined by the input method.

and what is true for the desire to eat, might as well be true for emotional states, but with the same reservations. if those stimuli aren't in tune with people's conscious will, they might have no or not the desired effect.

"our theories about consciousness are as naive as the first ideas cavemen probably had about the true nature of the stars"

yes. and isn't yours one of those naive theories about consciousness? one that tries to convince people that the self does not really exist?

"scientifically, we are at the very beginning of a true science of consciousness."

yes. and academics are very presumptuous people. they will terrorize the world with "mind-blowing" interpretations of studies before they worked themselves through to actual evidence. before they got to the bottom of what it is they are talking about.

"it is unsettling to discover that there are no colors out there in front of your eyes [...] there is just an ocean of electromagnetic radiation [...] the visual system in your brain is drilling a tunnel through this inconceivably rich physical environment and in the process is painting the tunnel walls in various shades of color."

so somehow the matter in front of my eye is just colorless electromagnetic radiation, but the matter behind my eyes, my brain, is capable of "painting" with various shades of "color". so where does this color come from all of a sudden? is the brain matter somehow different from the non-brain matter, so that it has the privilege of owning a bucket of color it can paint with?

we see color, so one has to assume that there is color. its ingredients on a microscopic scale won't eradicate that fact.

"whatever else may or may not be true about consciousness, once all the internal properties of your nervous system are set [...] its subjective content and the way it feels to you - are fully determined. "

one thing that might not be true is that it's not generated by the brain and instead filtered by it. so it's not necessarily (just) internal, otherwise psi would be impossible, because this requires your consciousness to get intertwined with that of others.

if following definition

"the content of consciousness is the content of a simulated world in our brains, and the sense of being there is itself a simulation [...] the brain constantly creates the experience that I am present in a world outside my brain"

was all-encompassing, it would follow, whether people have an OBE and experience themselves outside of their bodies or normally as being inside their bodies makes no difference. the experience either way is just in one's head. what happens is the first-person-perspective shifts to some place other than its usual position.

in theory, if the PSM was true, this would explain SOME out-of-body experiences. let's take a look at the Wilmot case, at an excerpt from "irreducible mind", page 395

"Mr. Wilmot and his sister Miss Wilmot were on a ship traveling from Liverpool, England, to New York, and for much of the journey they were in a severe storm. More than a week after the storm began, Mrs. Wilmot, in Connecticut, worried about the safety of her husband, had an experience, while she was awake during the middle of the night, in which she seemed to go to her husband's stateroom on the ship, where she saw him asleep in the lower berth and another man in the upper berth looking at her. she hesitated, kissed her husband, and left. the next morning Mr. Wilmot's roommate asked him, apparently somewhat indignantly, about the woman who had come into their room during the night. Miss Wilmot added her testimony, saying that the next morning, before she had seen her brother, the roommate asked her if she had been in to see Mr. Wilmot during the night, and when she replied no, he said that he had seen a woman come into their room in the middle of the night and go to Mr. Wilmot."

there's Miss Wilmot's testimony of having been told about a woman who visited the stateroom. there's Mr. Wilmot's testimony of having been told about a woman who visited the stateroom.

and Mrs. Wilmot's report that she had "a very vivid sense all the day of having visited my husband".

if the OBEs were just in one's head, how come people like Mrs. Wilmot are seen by others as an apparition? at the exact place they went to while outside their bodies?

he concludes his first chapter with *"everything we know about the human brain today indicates that the experience of being outside the brain, and not in a tunnel, is brought about by neural systems buried deep inside the brain."*

compare this to a statement of his from the introduction section.

"one way of looking at the ego tunnel is as a complex property of the global neural correlate of consciousness (NCC). the NCC is that set of neurofunctional properties in your brain sufficient to bring about a conscious experience."

and his further elaboration on the NCC in chapter 2

"the neuronal activation pattern underlying the totality of your conscious experience is made of millions of tiny electrical discharges and chemical transitions at the synapses. in strict terms, it has no fixed location in the brain."

this either means, the NCC, that which brings about a conscious experience, is a network stretching itself all over the brain (it's global), with no fixed location but at the same time it does have a location buried deep inside the brain. this would be a paradox then.

or (he isn't clear about what he exactly means) there are 2 neural systems responsible for creating experiences, one is the NCC, and another one, the one which he doesn't call by any specific name, which is buried deep inside the brain.

there's also a problem with the latter option.

since the NCC has access to all sorts of places, and the "not in a tunnel" part of the experience does not (it's buried after all) the NCC draws data from the "not in a tunnel" part, as well as from other places like the visual cortex responsible for processing visual information, a region at the far outer end of the back of the brain. and then brings about a conscious experience.

meaning, first the experience of not being inside a tunnel is being computed, and then the NCC generates that tunnel plus final experience.

how can these "not in a tunnel" neural systems make this tunnel disappear from one's awareness, when they do not know what this tunnel is composed of? he gives us no clue about this.

chapter 2

A TOUR OF THE TUNNEL

Thomas mentions 3 disorders, in which one's senses come apart. one of those is *"apperceptive agnosia"*. which he explains like this *"no coherent visual model emerges [...] sufferers typically have a fully intact visual field that is consciously perceived, but they are unable to recognize what it is they are looking at."*
in short, they see a mixed-up world.

"consciousness is what binds things together into a comprehensive, simultaneous whole. If we have this whole, then a world appears to us. if your senses come apart, you lose consciousness."

ok? no coherent world = no consciousness. then how can these sufferers of *"apperceptive agnosia"*, who see a non-coherent world consciously perceive that non-coherent world? as he wrote, they still have a *"visual field that is consciously perceived"* . but according to Thomas, those whose senses came apart, can't be conscious. and yet they are. strange...

Thomas is trying to redefine consciousness by making it dependent on the appearance of a unitary world, but needs to help himself out by incorporating some consciousness that's not dependent on the appearance of a unitary world

let's move on

"not only are there no colors out there, but there is also no present moment."

this is his conviction, but *"as modern-day neuroscience tells us, we are never in touch with the present, because neural information processing itself takes time."*

it seems modern-day neuroscience does not deny the presence of a present out there, it merely says we are not in touch with it. but can there be a *"present"* without there being a *"present moment"*?

"of course, [...] it does not follow that some kind of nonsmeared present could not exist on the level of physics"

so he eventually admits that it's impossible to infer such claims (about there not being a present) based on his theory of *"the phenomenal now"*

"but remember, a complete physical description of the universe would not contain the word "now"'"

it might contain a plethora of concatenated moments. depending on which one you focus on, that one would be the "now". and the moment you focus on it, that would also be a "now".

next he turn's to the *"dynamic filter of phenomenal transparency"* , which is about a "virtual window" one looks through, whose "frames" are not inside the field of view, invisible, transparent to the viewer , making us unaware of that there's a "virtual window" in front of us.

why did nature endow us with this peculiarity? this peculiarity of having our viewpoint placed so close to the window that we don't see its "frames", that we don't recognize there really is a barrier between us and what we see.

"imagine you could introspectively become aware of ever deeper and earlier phases of your information-processing [...] you would lose yourself in the myriad of micro-events taking place in your brain at every millisecond — you would get lost inside yourself."

or maybe not. looking through a book written in a foreign language doesn't make you get lost in it. you simply don't understand it. and let me mention *"phenomenal opacity"*, which he'll mention later.

Next comes a digression to Churchland's dream.

"if we just gave up the idea that we ever had anything like conscious minds in the first place" (Churchland)

this was part of the topic that there are subtle sensations people experience, but for which they have *"no internal criteria to reidentify them"* or in other words, the information they ingest through their senses are too many to manifest themselves in their consciousness. only some do. much subtle information fades out of their awareness.

now let's look at the rest of what Churchland said...

"and began to train our native mechanisms of introspection with the help of the new and much more finegrained conceptual distinctions offered by neuroscience, then we would also discover much more, we would enrich our inner lives."

okay? how is this training supposed to look like? scanning brains, looking at the results? to realize there's some activity going on for which one has *"no internal criteria"*? That there's subtle sensations one felt but they dropped out of one's mind? what a time consuming effort. and for what? why not learn chinese instead? and why would one have to give up the idea *"that we ever had anything like conscious minds"* for that?

more Churchland...

"the genuine arrival of a materialist kinematics and dynamics for psychological states and cognitive processes will constitute not a gloom in which our inner life is suppressed or eclipsed, but rather a dawning, in which its marvelous intricacies are finally revealed — most notably, if we apply [it] ourselves, in direct selfconscious introspection."

okay? selfCONSCIOUS introspection is what he proposes. he who claims there is no conscious mind. can one be (self)conscious without there being a conscious mind? can one be (self)conscious with a non-conscious mind? seems contradictory to me. or does being (self)conscious not depend on the mind at all? but then... where is this (self)consciousness located if not in the mind?

oxford dictionary's definition of mind: "the part of a person that makes them able to be aware of things, to think and to feel"

being able to be aware of things is what being conscious is. it is part of the mind.

next stop: evolution

"let's not forget that evolution is driven by chance, does not pursue a goal, and achieved what we now consider the continuous optimization of nervous systems in a blind process of hereditary variation and selection"

i re-pose a question Rupert Sheldrake posed in his book "the science delusion": "is there any evidence for the materialist belief that the entire evolutionary process is purposeless?"

if sth is driven towards a goal, it has a purpose. if it achieved *"the continuous optimization of nervous systems"*, how can you know this optimization wasn't a goal it was aiming at?

so, the main enigma he's trying to elucidate is

"why, and in what sense, was it necessary to develop something like consciousness in the nervous systems of animals?"

his answer.

"it is incorrect to assume that evolution had to invent consciousness [...]"

firstly, there is no evidence that evolution invented consciousness. there's evidence against it (NDEs, etc). therefore, it is incorrect to assume consciousness is produced in the brain instead of filtered by it.

secondly, the crux of his own topic was *"why was it necessary...?"* and not *"was it necessary...?"* . if his intention was to come up with an answer like *"it is incorrect to assume"* that it was necessary, why be incorrect and explicitly assume it, by asking

"why was it necessary...?"

so, why would consciousness not be necessary?

"in principle it could have been a useless by-product. no necessity was involved "

so it could have been a useless by-product instead. being a useless byproduct doesn't equal not to being necessary. this doesn't explain why there is consciousness, whether useful or not.

that sth is useless/useful seems to me like a judgment only conscious beings can make (who have values/goals). that is, in order to say that consciousness is useless, you need to be conscious first. therefore consciousness is highly useful (even necessary so) for being judged "useless".

among all the other things that could have evolved, consciousness *"clearly was adaptive and had survival value"*. therefore it is deemed useful according to Thomas. if being adaptive and having survival value is of use to evolution, then one must ask... of what use? when evolution supposedly has no purpose?

what follows next are paragraphs of theory about what the brain supposedly does, not too unsimilar to what he's already written, and having not much to do with evolution, despite it being part of that sub-chapter.

as i've already announced, eventually he mentions (as a *"technical term"*) the *"phenomenal opacity"* which is what happens when *"some processing stages are available for introspective attention"* and you don't get lost inside yourself, as one would assume, or as he has assumed one would,

because there apparantly is a *"world zero"* constantly present. which is basically the unitary world model he was talking about all along. when this one world is in place, and it's made explicit that it refers to reality, additional data can be accessed via introspection, data about what is going in inside yourself that is clearly distinct from one's perception (of the representation) of the outside. so you can distinguish e.g. your thoughts as being yours and the rest as being from out there.

this being in line with his theory so far, it would follow that one is capable of identifying one's thoughts as one's thoughts *"only if a robust first-order reality is already in place."* which is questionable. why would someone with a mixed-up world, or several worlds simulateously perceived (where none has priority over the other) not be able to distinguish thoughts/imagination/etc. from the rest? do these *"apperceptive agnosia"* sufferers confuse their thoughts with the surroundings? do they not know what they are thinking about?

next, he turns to following question *"what is this mysterious first person?"*

his answer, after a digression to some other topics, ultimately is... *"a self-model"*

ok, we already had that.

"is the existence of an experiencing self a necessary component of consciousness?"
his answer to his own question, *"i don't think it is — for one thing, because there seem to be "self-less" forms of conscious experience"*

he names 2 examples, the first one is the
cotard's syndrome where *"patients sometimes stop using the first-person pronoun and, moreover, claim that they do not really exist."*

claiming that one doesn't really exist and referring to oneself in the 3rd person "he/she/it" instead of "i", isn't elucidating. these people still draw a distinction between someone (this he/she/it that supposedly is not themselves) and the world. in place of an "i" there's a "he/she/it" then. there's still someone/something in that body, being aware of and referring to what that someone/something does. and there's more to that syndrom. people may believe that they lost their organs, their blood, that they or others are physically dead, when clearly they aren't. it's all rather obscure, maybe cotard's syndrome people are just detached from (commonly perceived) life?

maybe they have some kind of 2nd personality? where their primary one, their "i" is more of an observer of the 2nd one, and also not as in tune with what is happening.

if a cotard's syndrome sufferer tell you e.g. (s)he has no blood, when that's clearly not true, otherwise (s)he wouldn't tell you that, cause (s)he would be dead... why would you assume that just because (s)he tells you so, he/she has no self?

the 2nd example are

mystics with *"deep spiritual experiences in which no "self" was present, and some of them, too, stopped using the pronoun "I.""*

mystics however, don't claim they do not exist. they don't seem out of tune with (commonly perceived) reality. it's not comparable to cotard's syndrome. and while some of them may stop using "i", others don't.

let's take a look at Arthur Koestler's 1st (out of several) mystical experiences, that occurred to him during the Spanish civil war in 1937.

"I was floating on my back in a river of peace, under bridges of silence. it came from nowhere and flowed nowhere. then there was no river and no I. The I had ceased to exist [...] when i say "the I had ceased to exists" i refer to a concrete experience that is verbally as incommunicable as the feeling aroused by a piano concerto [...] the "I" ceases to exist because it has, by a kind of mental osmosis, established communication with, and been dissolved in, the universal pool. it is this process of dissolution and limitless expansion which is sensed as the "oceanic feeling", as the draining of all tension"

based on his report, what is happening is: his consciousness is being extended, ultimately encompassing much much more than just the bit he ordinarily is (aware

of). it does not follow that his self was somehow gone. if it had ceased to exist, for real, it could not have come back to its former, smaller form. but Arthur returned to his former state, that is, enriched by a mystical experience.

another indication that this "i" never completely vanishes during mystical experiences is that all mystical experiences are not the same. there's an individual component to each. at least all mystics report sth slightly different.

neither has it become (any more) clear what this 1st person is. nor whether there are "self-less" forms of consciousness, that *"there seem to be"*.

chapter 3

OUT OF THE BODY AND INTO THE MIND

apparently people evolved the ability to use tools they are holding in their hands, because your brain *"temporarily represents the tools as part of your self"*. that's his claim. despite people being perfectly aware of where their fingers end and where what they are holding begins.

it never becomes clear how on one side you *"consciously experience a tool as integrated into your bodily self"* but on the other side experience it as being separate from yourself.

"you can engage in goal-directed and intelligent tool use only if your brain temporarily represents the tools as part of your self"

since nobody experiences a tool as part of oneself, it would require further explanation as to what he exactly means.

"human beings treat virtual equivalents of their body parts as seen on a video screen as extensions of their own bodies. just think of mouse pointers on computer desktops"

i've spend lot's of time with computers and it never occurred that a cursor appeared to me as part of myself.

it all makes no sense, and of course there is no neurological data provided in support of his claims.

now, there's a co-called rubber hand experiment, which he regards as a variation of the representation of tools as part of one's body. where people put their real hand

under the table, and an artificial hand is placed on top of that table. apparently, people readjust their tactile senses to that rubber hand, by looking at it, and when it is touched, they feel that touch.

they've measured some increased activity in the premotor cortex. the rest is assumption. he assumes 2 perceptive fields become joined together there, "fused". how this "*fusion of the tactile and visual receptive fields*" exactly works, this conversion from what is seen (that someone touches an artificial hand) into a feeling remains unexplained.

there's also a clear difference between mistaking an artificial hand for one's real hand, and holding a tool.

next on his list are out-of-body experiences "*in which one undergoes the highly realistic illusion of leaving one's physical body*". or at least that's the materialist's assumption. most OBEs, unlike NDEs, don't provide the experiencer with any information that clarifies whether it is real or just imagination. some apparently do lead to the experience of events that later can be matched with true happenings, but even in those it is not clear to what extent they consist of really perceived visuals and what was constructed via imagination. the veridical form of OBEs almost never occurs in "laboratory tests", and the critique is: testimony alone is not enough to verify them.

but can one just dismiss real life reports? when there are so many of them? Thomas clearly can.

anyways, look up the Osis' and McCormick's 1980 experiment for scientific backup that OBEs partially lead to real information gathered from places outside from one's body.

before explaining how an OBE comes about, Thomas draws a connection between his invisible, weightless, "*subtle body*", "*made of pure information, flowing in the brain*" and the "*mythical*" soul as it understood "*for instance, in prescientific theories about a 'breath of life.'*". the breath of life is a source of energy and not a soul. also, contrary to what Thomas writes, "atman" is what hindus call their soul, not "prana". the latter however indeed stands for "*breath of life*". such a lapse of attention is telling... he couldn't care less about non-materialist's notions of a soul.

and isn't it a coincidence? he promptly refers us to Blackmore and her reductionist theory of OBE. Blackmore is notorious for misrepresenting OBE cases that don't suit her. in the Wilmot case i've mentioned before, she discredits Mr. Wilmot's testimony because he has been seasick, pretends Miss Wilmot's testimony doesn't exist and that Mrs. Wilmot never reported she had an OBE. the latter 2 "assessments" are lies, and to question someone's grasp of what has been communicated to him about the apparition his roommate witnessed, only because he was seasick (means he felt like vomiting) is questionable itself.

so in Blackmore's mind OBEs are "*created by brains that are cut off from sensory input during stressful situations and have to fall back on internal sources of information*" and are "*spatially organized from a third-person perspective and include a realistic representation of one's own body*". which (in theory) would account for only the non-veridical aspect of only some OBEs. not all happen *during stressful situations*. certain individuals, like the subject in the Osis' and McCormick's experiment, can induce OBEs at will. not all OBEs happen as a result of a seizure or while one is asleep, so being cut off from sensory input can hardly be the criterion there and for a case like this:

(from Thomas' book) as reported by a marathon runner, "*after running approximately 12–13 miles . . . i started to feel as if i wasn't looking through my eyes but from somewhere else. . . . i felt as if something was leaving my body, and although i was still running along looking at the scenery, i was looking at myself running as well.*"

she was looking both, through her body and through some external view at her body.

as for the exact stimulus that might cause OBEs, Thomas' conclusion after some contemplation and weighing of the data from recent findings is: OBEs could be induced in all sorts of different ways.

so we now know as much as we did before. Great.

next he reports of an experiment with people standing in front of a projected image (of themselves or of a mannequin), so they were looking at either their own backs or the backs of mannequins. this made some of them feel "*as though*" it was their own body they were looking at. he calls this a virtual OBE.

feeling "*as though*" is very vague, though. it is not clear what exactly they felt, if it is in line with what a real OBE feels like.

on his journey to the core of self-consciousness, he breaks for a cup of tea (not literally) and proposes this: "*minimal self-consciousness is not control, but what makes control possible*"

self-consciousness is being aware of one's self. that's one of the most common definitions, one that couldn't be more minimalist. why redefine it? but after a slight elaboration, he returns to a more conventional definition

"conscious selfhood is a deep-seated form of knowledge about oneself"

however, "*plus the realization that the body is now available for global control*".

why this extra (control enabling) bit is a necessity remains unexplained and contradicts some OBEs in which people have no body.

i'll skip the part where he compares living to playing video games.

and move to the end of the chapter, that is, the "*mirror box*" experiment.

an experiment where one looks at a mirror that covers one of one's hands, the other hand is being reflected in that mirror, so what one sees are the movements of e.g. one's right hand in the position where one's left hand is.

based on Michelsen's studies on healthy volunteers, "the mirror illusion increases the tendency of one limb to take on the spatial properties of the other limb"

this would indicate that there is some sort of interconnection between visual input and motion. and maybe some tendency towards bodily symmetry

Thomas actually provides us with a non-healthy person case, conducted by Ramachandran where the subject feels a phantom limb that he normally can't move. via "*mirror box*" he was able to copy the movements of his healthy hand onto his normally "*frozen*" phantom hand. thus moving both synchronously. as long as he kept looking at the reflection that replaced the sight of a non-existent hand.

there's 2 noteworthy comments Thomas makes about this case.

first, "*our best current theories*" say that we "*imagine our body movements without actually executing them*", in advance, because the actual feedback from our arms and leg takes a while before it reaches our brains.

but then, imagining your hand movements would be enough to "*unfreeze*" a phantom limb. but it's obviously not. the subject currently in question needed visual verification that his hand is moving.

second, he says that the reason he couldn't move his phantom hand in first place was because, his "*self-model had learned that whatever motor commands he issued to his amputated arm, there would be no feedback telling him about a changed limb position*"

he ceased to see his hand, so he unlearned to move it. he still felt it, but it was "*frozen*". but as soon as he saw the reflection, he was immediately able to move it in sync with his remaining hand. the blockage was gone. he could move his phantom hand again. according to Thomas's explanation, the self-model thus learned that it receives feedback again

as Thomas wrote it, the "*changes in the visual self-model perfectly matched the motor commands*" once again.

there's a problem. if looking at a none-existent hand was the reason for his "*self-model*" to render it motionless. and seeing it again reverted this. why then did the "*mirror box*" effect stop as soon as he stopped looking at the reflection (he closed his eyes at some point during that experiment). seeing nothing brought him back to the previous state. the last image he had before he closed his eyes was: my hand exists.

and yet it was again "*frozen*" with eyes closed.

is closing one's eyes enough for the self model to learn that "*there would be no feedback*" ever again?. normally, when people move their body, and close their eyes during this process, they can continue their movements.

it's still unclear what exactly is going on during these "*mirror box*" experiences, obviously visual input plays a role but Thomas' explanation is unsatisfactory.

chapter 4

FROM OWNERSHIP TO AGENCY TO FREE WILL

in his endeavor to explain the alien hand syndrom (where people lose control over one hand) he incorporates Gibson's idea of "*affordances*" (the original notion of them was: the objects one perceives somehow latently contain all possible actions that can be performed on them) into his theory.

it takes him a while to get to his point which is, everyone has a bit of an alien-hand syndrome: your body generates urges to do sth, based on the possibilities of what can be done. then your "*attentional agency*" (a part of your ego/self-model) allows you to select among them.

how this selection happens and how these affordances/possibilities come about remains unexplained.

so when people have the alien hand syndrome, apparently a part of their will gets shifted outside of their self-model. they lose part of their sense of agency. how this shift occurs remains unexplained.

such a theory throws up more questions than it answers. that's quite an achievement.

in line with this syndrom he also mentions akinetic mutism

where "*patients do nothing but lie silently in their beds [...], they are not agents: they do not act in any way. they do not initiate any thoughts. they do not direct their attention. they do not talk or move.*"

akninesia means one doesn't move

mutism means one doesn't speak

"*they do not talk or move*" yes, the rest about them having no thoughts is speculation.

also about them having their will shifted outside of their realm of sensed agency is speculation. maybe they still will to move, but (for unknown reasons) can't.

next is a recap on Stéphane Kremer's finding that, upon stimulation of a brain region, his subject felt a urge to grasp at sth. a presumptuous conclusion followed promptly: *"whatever else the conscious experience of will may be, it seems to be something that can be turned on and off with the help of a small electrical current from an electrode in the brain"*.

but having a urge does not equal one wills. no matter how strong that urge might be. people have a urge to breathe, but they still might will to run out of oxygen. this urge is so strong, that holding your breath won't work, eventually part of your brain will forcefully cease your action. but the fact that people still manage to asphyxiate themselves, by drowning, or hanging, or plastic bag, shows that, despite of urges the brain might generate, the will is not overridden by it.

that last experiment is followed by another one, Wegner's and Wheatley's.

2 people were simultaneously moving a computer mouse to various positions on the screen, one of them, the actual subject, was listening to random words and to music via headphones. every once in a while, they were to stop the cursor on some random object on the screen. unknown to the subject, the other person was instructed (a few times) to move the cursor to a specific position. at such instances what the subject was listening to through their headphones, before the move occurred, was a short naming of the object they are about to move to. as a means of suggestion. the interval between hearing the suggestion and the command to move somewhere ranged from 30sec to 1 sec.

after the test, the subject had to rate who initiated the moves. the result, according to Thomas, was *"there was a general tendency to perceive the forced stops as intended."*

first i'll refer to Hassin's (much more detailed) description of the test

homepage.univie.ac.at/andreas.olbrich/sc1.pdf

(note, it's in german, but all english description (i've found) are just too brief, just like Metzinger's)

which says "the analysis of the test speaks in favor of that the subject would not have pointed the cursor on the object the confederate made them to" according to Hassin, the general tendency went exactly in the opposite direction of what Thomas claims.

yet, in those cases, in which the object the confederate directed their move to was named to the subject just a few secs before that move occurred, the subject often appeared to have mistaken the confederate's intention for her own. and thought she pointed onto that object because she wanted to.

or maybe it just happened that she wanted to point to that very position, because what she heard inspired her to move there, because she was paying attention to what she heard and used it as a reference to make her decision?

the experimenter's don't take this possibility into account. the experiment doesn't

cover her precise thoughts. all we know is, somehow hearing the object via headphones was a factor in arriving at her decisions. maybe even a factor that was a factor only because she permitted it to be one. because she has willingly let herself get influenced by it.

it remains obscure how acoustic suggestions exactly influence the subject, and whether people with low suggestibility, those not open-minded to such tests are influencable by them. like it is the case with hypnosis. for some it works, for others it doesn't. the subject here obviously embraced the opportunity to be a subject, which is a factor itself, and willingly did what she was told to do and (one can assume) payed special attention to what was going on (e.g. what she was hearing). her mindset can't be just ignored here.

to jump to the conclusion like Wegner and Wheatley did, and like Thomas did that the *"will is just a hallucination"* is mind-blowingly presumptuous. but as if they'd mind...

this chapter ends with the last almost interesting part of this book, it's about free will.

according to Thomas, *"we clearly experience ourselves as beings that can initiate new causal chains out of the blue — as beings that could have acted otherwise given exactly the same situation"* however, *"conscious intentions are evasive: the harder you look at them, the more they recede into the background."* in other words, we can't introspect into the origin of our will. it might be it is just the result of unconscious brainactivity. that's it. no Thomas takes no definite stance in this matter, but he tends towards the nonexistence of free will.

this is ALMOST interesting because it's an important topic, he just doesn't deliver anything thought provokingly new.

the scientific worldview is *"the current state of the physical universe always determines the next state of the universe, and your brain is a part of this universe"* so your thoughts are predetermined by physical laws acting upon what has happened just one moment ago.

Rupert Sheldrake would disagree. i'd too.

assuming there's just matter and quanta aren't animated (by spirituality) but depend on random fluctuations ... randomness would certainly play a role.

assuming there's just matter and quanta are animated (by spirituality) not depending on random fluctuations ... spirituality would certainly play a role.

both scenarios offer themselves for a plethora of theories of a free will
he offers not one, so i will.

for example, in the non-spiritual case, one's inborn personality could modulate thoughts/impulses produced by the brain with a factor of chance. ultimately producing results that are unpredictable, therefore FREE of a 100 percent determined outcome. free will.

i'll recommend Lewis' and Macgregor's ON INDETERMINISM, CHAOS, AND SMALL NUMBER PARTICLE SYSTEMS IN THE BRAIN, (26 pages) for more possible free will models

chapter 5 is about lucid dreams, chapter 6 about mirror neurons, chapter 7 about AI , the 8th about the advent of mama academia's kingdom

"in the future, however, people who believe in the existence of a soul or in life after death may no longer meet with twentieth-century western tolerance but with condescension — much as do people who continue to claim that the sun revolves around the earth"

the last one is about drugs and Thomas gives us ethical advice

most of the "ground work", that is everything that is not his theory (the various experiments he presents and the mainstream materialist propaganda) has already been written on other places, and is often much more thoroughly explained there. his theory itself is based on neuroscientific assumptions and is presented in a suboptimal way (there's equivocations as mentioned earlier, he takes his time to get to the point and repeats himself). the OBE section especially is miserable, because he disregards the cases with clearly veridical experiences. he says there is no soul but NDE science has proven the opposite. his theory is devoid of any entry point for quantum mechanics. which are important. he should read up on that topic.